

REMARKS/ARGUMENTS

The Office Action mailed April 23, 2007 rejected all pending claims under 35 U.S.C. § 101. Reconsideration is respectfully requested in view of the above amendments to the claims and the following remarks.

A. Claims 20, 41, 62 and 64-66 Rejected Under 35 U.S.C. § 101

The Office Action rejected claims 20, 41, 62 and 64-66 under 35 U.S.C. § 101. In view of the above claim amendments and the following remarks, Applicants respectfully request that this rejection be withdrawn.

It is clear that “computer-based programming constitutes patentable subject matter so long as the basic requirements of [35 U.S.C.] § 101 are met.” *AT&T Corp. v. Excel Communs., Inc.*, 172 F.3d 1352 at 1360. The Office Action asserts that the claims are directed to a judicial exception. However, if a claimed invention either “transforms” or “otherwise produces a useful, concrete, and tangible result” then it is “directed to a practical application of a 35 U.S.C. 101 judicial exception” and is thus eligible for patent protection. MPEP 2105 (IV)(C)(2). So, the analysis of whether the claims satisfy § 101 hinges upon whether the claims transform or otherwise produce a useful, concrete, and tangible result.

The Office Action correctly acknowledges that “the claims appear useful and concrete.” Office Action, page 2. However, the Office Action asserts that “there does not appear to be a tangible result claimed.” Office Action, page 2. Applicants respectfully disagree.

The “tangible” requirement in the MPEP requires that a claim that is directed to a judicial exception “must set forth a practical application of that judicial exception to produce a real-world result.” MPEP 2106(IV)(C)(2)(2)(b) (citing *Gottschalk v. Benson*, 409 U.S. 63, at 71-72, 175 USPQ 673, at 676-77). Furthermore, “the mere fact that a claimed invention involves inputting numbers, calculating numbers, outputting numbers, and storing numbers, in and of itself, would not render it nonstatutory subject matter, unless, of course, its operation does not produce a ‘useful, concrete and tangible result.’” *State Street Bank & Trust Co. v. Signature Financial Group Inc.* 149 F.3d 1368, at 1374, 47 USPQ2d 1596, at 1602 (Fed. Cir. 1998) (quoting *In re Alappat*, 33 F.3d 1526, at 1544, 31 U.S.P.Q.2D (BNA) 1545, at 1557 (Fed. Cir. 1994)).

The Office Action asserts that the result in claim 20 is not tangible “since the outcome of the sending step has not been used in a disclosed practical application.” Office Action, page 2. In accordance with claim 20, an application receives information on a communication port that it expects to receive the information through even though the computing device initially received the information on a communication port that that the application does not expect to receive the information through. This is a tangible result. Namely, the practical application of the method is that the application that is running on the computing device is able to receive information that it otherwise would not be able to receive without the method claimed by Applicants. Receiving information where it was previously not possible is clearly the type of “real-world result” required by § 101. Applications running on computing devices perform innumerable functions in the real world, and providing an interface allowing information sent through a first communication port to be received by the application through a second communication port is a result that can be used by these applications when performing their real-world functions.

Moreover, claim 20 has been amended to recite that “the information is received by the application through the second communication port and processed by the application.” This amendment is supported by at least paragraphs 37, 41, 49, 50 of Applicants’ specification. Applicants further submit that the application receiving the information through the second communication port and processing the information constitute practical applications.

Additionally, the “information” being “processed by the application,” as recited in amended claim 20, constitutes a “transform[ation]” of “an article or physical object to a different state or thing.” MPEP 2106(IV)(2). Several decisions have held that the manipulation of data that is representational of physical (and thus tangible) objects or phenomena constitutes patentable subject matter. For instance, the Federal Circuit in *Alappat* held that the claimed invention, which encompassed converting one type of electronic data (vector list data) representing an electronic input signal into a different type of electronic data (pixel illumination intensity data), was patentable subject matter. *In re Alappat*, 33 F.3d 1526, at 1538-39. Previously, the Federal Circuit had also held that “computer-performed operations [that] transform a particular input signal to a different output signal, in accordance with the internal structure of the computer as configured by electronic instructions” was patentable subject matter. *Arrhythmia Research Technology, Inc. v. Corazonix*

Corp., 958 F.2d 1053, at 1060 (Fed. Cir. 1992). Notably, the court in *Arrhythmia* stated that the number obtained by the claims at issue was not an “abstraction” without practical application, but rather “it is a measure in microvolts of a specified heart activity.” *Arrhythmia*, 958 F.2d at 1060.

Here, like the pixel illumination intensity data in *Alappat* and the measure in microvolts of a specified heart activity in *Arrhythmia*, the resulting information from the method in claim 20 is a representation of a physical object identifier, for instance a bar-code or an RFID tag. This information is received as object identifier data from which the information is identified and sent along to the application where it is processed. This method is surely analogous to the ones in *Alappat* and *Arrhythmia* where electronic signals were received, manipulated, and then outputted. Thus, since the output of Applicants’ method “transforms an article or physical object to a different state or thing,” claim 20 is patentable subject matter.

In fact, the data manipulated within the method need be a representation of a physical object. In *State Street Bank*, the Federal Circuit held that “the transformation of [electronic financial] data...by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces ‘a useful, concrete and tangible result.’” *State St. Bank & Trust Co. v. Signature Fin. Group*, 149 F.3d 1368, at 1373 (Fed. Cir. 1998). At the least, the result claimed by Applicants is equally “tangible” to a share price, which is clearly not physical and yet still considered to be “tangible” by the Federal Circuit. By analogy, then, the “transformation” in Applicants’ claim 20 from “object identifier” to “object identifier data” to “information” constitutes a practical application of an algorithm because it produces a useful, concrete and tangible result.

Likewise, a process in *AT&T Corp. v. Excel Communs.* using an electronic “message record for long-distance telephone calls” was held to be patentable subject matter. *AT&T Corp. v. Excel Communs., Inc.*, 172 F.3d 1352, at 1361 (Fed. Cir. 1999). The electronic “message record” was “enhanced by adding a primary interexchange carrier (“PIC”) indicator” in order to aid “long-distance carriers in providing differential billing treatment for subscribers.” *Id.*, at 1353. In its most basic form, the claim at issue in *AT&T* was merely manipulating electronic data, and yet the Federal Circuit still held that because the “process...produce[s] a useful, concrete, tangible result...on its face the claimed process comfortably falls within the scope of § 101.” *Id.*, at 1358. Since

“facilitat[ing] differential billing” is one of the many conceivable functions of the “information” that is “processed by the application” in claim 20, the method is patentable subject matter.

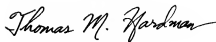
Since Applicants’ amended claim 20 enables an application running on a computing device to receive information it otherwise would not have received, the method constitutes a tangible, real-world result. In addition, the processing of information constitutes “transformation” as defined by the MPEP and relevant case law. Accordingly, Applicants respectfully submit that claim 20 is directed toward patentable subject matter, and respectfully request that the rejection of claim 20 and dependent claim 64 be withdrawn.

Independent claims 41 and 62 include elements that are similar to those that were discussed above in connection with claim 20. Accordingly, Applicants respectfully request that the rejection of independent claims 41 and 62 and dependent claims 65 and 66 be withdrawn for at least the same reasons as those discussed above in connection with claim 20.

B. Conclusion

Applicants respectfully assert that all pending claims are patentably distinct from the cited references, and request that a timely Notice of Allowance be issued in this case. If there are any remaining issues preventing allowance of the pending claims that may be clarified by telephone, the Examiner is requested to call the undersigned.

Respectfully submitted,



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